

INCH-POUND

MIL-PRF-3098/130C

27 August 1997

SUPERSEDING

MIL-C-3098/130B

24 September 1992

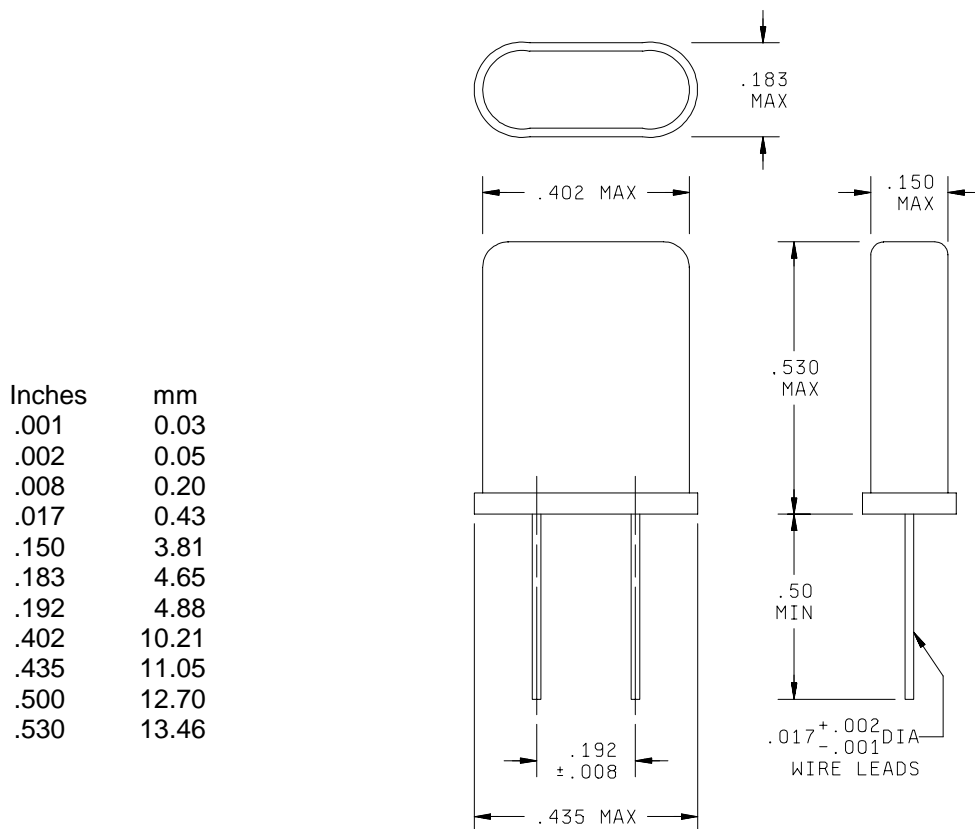
PERFORMANCE SPECIFICATION SHEET

CRYSTAL UNIT, QUARTZ, CR149/U

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-3098.

Pertinent characteristics: 46 MHz to 100 MHz; fifth mechanical overtone; noncontrolled; series resonance.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking to be in accordance with MIL-PRF-3098.

FIGURE 1. Crystal unit - CR149/U.

REQUIREMENTS:

Dimensions, marking, and configuration: See figure 1.

Frequency range: 46.0 MHz to 100 MHz, inclusive.

Operating temperature range (noncontrolled):

Room temperature: +25°C to +30°C, inclusive.

Primary operating temperature range: +10°C to +25°C and +30°C to +80°C, inclusive.

Secondary operating temperature range: -40°C to +10°C and +80°C to +90°C, inclusive.

Equivalent resistance: 50 ohms.

Mode of oscillation: Fifth mechanical overtone.

Frequency tolerance:

Room temperature: ± 10 ppm.

Primary: ± 25 ppm.

Secondary: ± 50 ppm.

Rated drive level: 1.0 mW, maximum.

Resonance: Series.

Capacitance, shunt: 6.0 pF +0.5 pF, -1.0 pF.

Shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Vibration: Method 204, MIL-STD-202, test condition A.

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Thermal shock:

Frequency change permitted: ± 5 ppm.

Equivalent resistance change permitted: ± 10 percent.

Aging:

Frequency change permitted: ± 5 ppm.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - CR
Navy - EC
Air Force -85

Review activities:

Army - AR, MI, SM
Navy - AS, CG, MC, OS, SH
Air Force - 17, 19, 99

Preparing activity:

Army - CR

Agent:

DLA - CC

(Project 5955-0697-84)